

ANCHORAGE AMATEUR RADIO CLUB  
JUNE NEWSLETTER

CALENDAR

JUNE 1 ELECTION OF OFFICERS AND GENERAL MEETING ROOM 123 CONSORTIUM  
LIBRARY UNIVERSITY OF ALASKA 7PM

JUNE 5 PARKA MEETING 7:30 PM GRANDVIEW GARDENS LIBRARY, CORNER OF  
PRIMROSE AND DEBARR ACROSS FROM THE BIG BOY

JUNE 21 BOARD MEETING FRANK DRAKES QTH 7 PM

JUNE 23 & 24 FIELD DAY AND SOCIAL SEE ARTICLE FURTHER ON

NETS

AARC EMERGENCY NET	WEEKLY ON THURS.	8PM	146.52
SNIPER	DAILY	6PM	3.920
SOURDOUGH	MON-FRI	6:30 PM	3.915
GRUBSTAKE	DAILY	7:30 PM	3.94
SEASAW	DAILY	4:30 PM	3.900
DX ASSN	MONTHLY FIRST SUNDAY	7:00 PM	3.895
ALASKA-PACIFIC NET	MON-FRI	8-9AM	14.292
ALASKA BUSH NET	DAILY	6:30-8:30 PM	7.250
10-10 CHAPTER NET	SATURDAYS	10:00 AM	28.849

THE ANCHORAGE AMATEUR RADIO CLUB IS AFFILIATED WITH THE UNIVERSITY OF ALASKA AND THE ANCHORAGE COMMUNITY COLLEGE AND MEETS ON THE U OF A CAMPUS

CLUB FONE Sometimes the club answering fone works pretty good then at other times it goofs. It seems to be behaving itself at the moment, and I am going to try and put on a current tape soon!!!!!! the number is 344-2835 A gal (by the voice) WB7OZU sez hi to the club and said she is visiting from Washington. A gal called in to get help talking to someone in the bush and by the time I called back she had already found "Dave" to help. Another message left on the tape from Jose Peguero who will be at the next meeting and is interested in ham radio lets be on the look out and welcome Jose.

You'll notice an update for the roster with the latest third party traffic countries on the other side. I thought I was being clever to put useful keep type info on the back of keep type roster. Let Cathi WL7ABO know about any roster changes. Phone 694-3258 or catch her on 34/94.

This issue of the Newsletter will have another tower article from KL7BB and taken from "THE TOTEM TABLOID" of the Western Washington DX Club Inc. Also two Field Day and Parka items so that you will be sure to remember Field Day is coming and besides I couldn't choose which one. An article from a 1928 Radio Amateur's Handbook. And one from the ELECTRON of the Cleveland Institute of Electronics on a more modern subject.



PARKA.....Sue Michael, WL7ABK, is our representative to the YLRL convention in Philadelphia this summer. We would like to thank all who bought raffle tickets and cups and those who donated to the cookie fund at the meetings for their support in making it possible for ALASKA to be represented at this convention. PARKA yl's and xyl's will continue to bring fresh home-made goodies to the AARC meetings.

FIELD DAY.....JUNE 23 and 24.....EAST HIGH SCHOOL....

We need equipment to use for field day, any antennas, radios, coax, or misc. items that you may have to loan will be appreciated. Call Bill Reiter, KL7ITI, at 337-1779.

We also need lots of operators to keep the stations going around the clock so lets everyone make a real effort and come out in support the club field day endeavor this year.

PICNIC..... Saturday night during field day there will be a family picnic at the field day site and the club is providing the chicken and soft drinks. We would like all who come to bring a pot luck dish to share. All whose last names end with A to M please bring SALADS, All whose last names end with N to Z please bring DESSERTS. We hope everyone will come out to eat, socialize and operate with KL7AA. Any ideas or questions on the food call Mary, KL7P, at 753-9400.

We also will need tables to set up on, also saw horses with plywood over would make good tables so anyone who can offer the use of these would be appreciated also.



FROM THE PRESIDENT'S SHACK - Tom Owens, K7RI

In the March issue of the Tabloid, this column addressed the impact of the February 13, 1979 storm which sank the Hood Canal Floating Bridge and inflicted several million dollars damage in the Seattle area. Many local amateurs suffered losses in varying degrees to their towers, antennas, rotators, etc. Luckily, most of us experienced relatively minor financial losses.

However, like those whose homes were extensively damaged, a number of our fellow hams had losses in the tens of thousands of dollars when their installations were completely, or significantly, destroyed. Fortunately, most were totally, or partially, covered by insurance; but, some were not, and have had to absorb the decrease or total disappearance in value of their assets with nowhere to turn except their own financial resources. Hence a pretty compelling argument for transferring that risk to someone else..... an insurance company.

BUT, one should fully understand exactly what his risks are, what risks are being transferred (and what risks are not), what perils will be covered, what perils will be excluded, what deductibles apply. He should know company requirements in case of a loss, what options the company has with respect to indemnification of losses, when the loss will be payable.....and a host of other information too. In short, the insured should UNDERSTAND what the language in his policy really means!

Obviously, my treatment herein must be relatively brief. I'll address the subject in terms of ANY loss and comment specifically regarding the issue of amateur towers and antennas.

To begin, there are three ways to classify risks. One, PERSONAL RISKS include those relating to life and health. Two, PROPERTY RISKS deal with those pertaining to direct or indirect destruction of property. Three, LIABILITY RISKS include those resulting from the law of liability for one's acts or omissions. Liability risks are of two major types: bodily injury and property damage. We will concern ourselves with property and liability risks (it is assumed the merits of life and health insurance are well understood as they relate to life in general and working on and around towers in particular).

A few comments and definitions are in order at this point. Generally, only those provisions and coverages specifically contained in writing within the policy will be enforceable at law.

An ENDORSEMENT is any provision added to an insurance contract whereby the scope of its coverage is clarified, restricted, or enlarged.

An ACT OF GOD is any peril operating without human influence and not preventable by human insight.

A PERIL is the cause of the loss. Perils include fire, windstorm, accidents, theft, etc.

To INDEMNIFY is to pay compensation or reimbursement for actual damage or loss sustained by the insured. It is to be noted that such compensation is NOT necessarily the full face value of the policy.

DECLARATIONS are statements as to the parties to the contract, the period of the contract, the property and perils insured, the premiums, and other pertinent information.

The basic conditions and exclusions which are standard throughout the industry are found on the back of the first page of all standard fire insurance contracts and are included



in the popular multi-line contracts known as "homeowners' policies". There is a statement of perils normally NOT covered. Notice is given that the company has an option to either provide payment for a loss or restore the property to its former condition. Within 60 days after receipt of a "proof of loss", amounts for which the company is liable shall be payable. Insureds may NOT sue an insurer until all the policy requirements have been complied with, nor after one year following the loss. The requirements for filing a "proof of loss" are spelled out; the insured must:

1. Give immediate written notice of the loss to the insurer.
2. Protect the property from further damage.
3. Separate the damaged and undamaged property.
4. Furnish an inventory of the damaged property, its costs, value, and a statement of the losses sustained.
5. Render a written "proof of loss" within 60 days including detailed information about the loss (its time, origin, insurable interests, occupancies, etc.).
6. Exhibit to the insurer the property and books of account.

In addition, there are several other conditions and exclusions listed. It would behoove one to read the policy with particular attention to this section, the declarations, and endorsements. Be sure to get a clarification of any unclear or doubtful coverage in writing from your agent (and file it with the policy).

Standard fire policies cover losses from fires, lightning, and removal... and that is all. An extended perils endorsement will expand coverage to include losses due to windstorm, hail, explosion, riot, aircraft damage, vehicle damage and smoke damage. However, perhaps the best approach is a special "all risks" coverage endorsement; it includes ALL POSSIBLE PERILS EXCEPT those specifically excluded.

An even better approach than having several different policies for each different peril (fire, liability, theft, etc.), is to have only one more inclusive "homeowners' policy". Besides being less cumbersome than having several individual policies (each with its own policy fee), most homeowners' policies have replacement cost coverage for the home and garages IF the whole amount of insurance in force on the building is 80% or more of the actual replacement cost. (This is known as the coinsurance clause.) Thus, depreciation will not be subtracted in calculation the claim payable and the policyholder will receive full replacement or repair cost on these items.

However, it is necessary to keep the value of your insurance up to date with current replacement costs. Many policies have "inflation guard endorsements" which automatically increase the policy amounts from time to time (for additional premiums). However, it is wise to verify at least 80% coverage once per year with the agent. Why? To avoid a partial payment of a loss due to noncompliance with the coinsurance clause. Example. A policyholder sustains a \$5,000 loss on his home due to fire. His fire insurance policy has an 80% coinsurance clause. The policyholder had insured his home for \$40,000 but its fair market value (replacement value) was \$60,000. How much would the policy pay on the loss? \$4,167. That means the insured would have to absorb \$833 out of his own pocket. (If the house was totalled, a \$60,000 loss, he would have to absorb a \$10,200 loss.)

Formula: 
$$\frac{\text{Insurance You Actually Have}}{\text{Insurance You Should Have}} \times (\text{The Actual Loss}) = \text{YOUR RECOVERY}$$

\$60,000 X 80% = \$48,000 (You Should Have)

$$\frac{\$40,000}{\$48,000} = .83$$

\$5,000 X .83 = \$4,167



What might a typical homeowners policy provide in the way of coverage limits? Example.

#### Section I (Property)

a. Described Dwelling	80,000
b. Appurtenant Structures (Garages, Tool Sheds, Towers, etc.) *	8,000
c. Unscheduled Personal Property	64,000
d. Additional Living Expenses	16,000
e. Scheduled Property (Jewelry, Cameras, Furs, Hobby Equip., etc.) **	20,000

#### Section II (Liability) \*\*\*

f. Personal Injury Liability (Per person & per occurrence)	100,000
g. Medical Payments	2,000
h. Property Damage Liability (Per occurrence)	100,000
i. Voluntary Property Damage	1,000

\* Be certain your tower/antenna installation meets the policy definitional requirements to qualify as an appurtenant structure. Get an affirmation in writing from your agent and file it with the policy. In addition, secure an Appurtenant Structures Form HO-48A Endorsement for the full replacement value of your installation. It would read:

"In consideration of an additional premium, the additional limit of liability shown below for each appurtenant structure shall be considered specific insurance applicable to such structure."

#### Identification of Structure

#### Additional Limit of Liability

1. Radio Tower and Antennas

\$15,000 (Or whatever it is worth)

The HO-48A is what you are relying on in case of a loss to the tower. Otherwise, the 10% limitation for Section I b property would fall far below your actual loss. Besides, that coverage should be saved for other appurtenant structures, if any. BE CERTAIN TO ATTACH YOUR COPY OF THE HO-48A TO YOUR POLICY!

It is this author's opinion that properly executed Section I e Scheduled Property Endorsement is a far superior method of insuring all of the "in shack" equipment than group policies currently available through the ARRL. Be sure to specify the current replacement cost of the equipment (with an inflation clause, if possible) and attach the endorsement to the policy.

Such a homeowner's policy would likely have a \$50, or \$100, deductible. That means the insured absorbs the first \$50 or \$100 of loss (unless he wished to pay more for a no-deductible policy. Such is not recommended.

It is recommended that you have a Special Homewoner's Form No.3 which specifies the following:

"All risks of physical loss, except those specifically excluded (such as flood, earthquake, landslide, war, backing up of sewers)." Those are the perils insured against....as far as the dwelling is concerned.

The insuring clause for the contents of the dwelling would protect against the perils of:

"Fire and lightning, extended coverage perils, theft, vandalism, falling objects, collapse, water damage, rupture of heating systems, and freezing."



Liability insurance is an absolute necessity. For those with substantial net worths, or people with attractive nuisances like radio towers (or both), larger than standard liability limits are a most prudent expenditure. For a modest amount, an "umbrella liability" policy can be superimposed on your existing auto policy. It provides extra limits with a combined blanket single limit over your other existing limits. In addition, it provides for other liability exposures not covered by the underlying contract. Such policies are inexpensive and are written for a minimum of \$1,000,000.

Losses will be handled in one of three ways, depending on the way you set up your policy. If the tower/antennas are treated as unscheduled personal property, they likely will be depreciated from original cost and the maximum coverage will be 50% of the dollar value you have on your house (Section I a). If they qualify as an appurtenant structure (Section I b), they may, or may not, be depreciated (depending on the verbiage in the policy) and the maximum coverage will be limited to 10% of the dollar value of the house. If you have the special HO-48A endorsement with an inflationary clause of "work of art" clause, you likely will recover full current replacement cost (assuming that value is not greater than your coverage limits).

#### ELECTIONS

Elections will be held the June 5 meeting. The nominating committee has selected the following slate of nominees.

For President..Fred Wegner KL7HFM for VP. Frank Drake KL7IPV for Sect.  
Loraine Conary KL7IOF for Treas Betty Rhodes KL7AP for Activities  
Chairman Dave Lawrence KL7HAB for 1 year board members Bob KL7HIU  
Sue Michael WL7ABK Tim Michael KL7JGK Don Baine KL7IGE Ken Greene KL7JAI  
Harley Steward KL7IZZ and for 3 year board member AL7W Lee Ball.

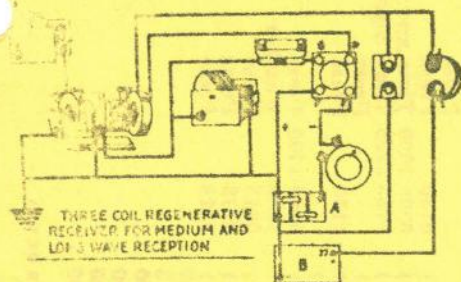
There must be at least two names for each office to hold the election.  
Other nominations will be made from the floor. THERE WILL BE FREE DOOR  
PRIZE TICKETS TO EVERY CLUB MEMBER PRESENT AT THE MEETING. PLUS THE FREE ONE  
FOR GETTING THERE BEFORE THE MEETING STARTS AND VARIOUS AND SUNDRY OTHER  
WAYS OF GETTING FREE TICKETS.

THE contest this month was a Lucy Goof. It was supposed to be who guessed closest to the number of messages sent but I forgot and there was no way to place your guesses. You wouldn't have guessed it anyway there were more than 2600 Mother's Day messages handled thats right TWENTY SIX HUNDRED MOTHERS DAY MESSAGES HANDLED. It made many friends for ham radio and the AARC. Many thanks are owed many people that made it a real huge success. A real worthwhile project.





obtaining code practise an excellent receiver can be made by purchasing a couple of good variable condensers, a 3-



coil socket mounting, and a few honeycomb coils wound on 2 1/2" forms. The "three-coil" regenerative (primary-secondary-

tickler) circuit should be used, giving flexible and selective tuning with no trouble in getting it to work. Such an all-wave receiver will work most efficiently on the long waves. It will be inferior to a special receiver for short-wave and broadcast work, however.

Right here we will list the materials needed to construct such a long-wave code-practice receiver:

- 1 three coil honeycomb mounting
- 2 good variable condensers (.001  $\mu$ f. max.)
- 1 .00025  $\mu$ f. fixed mica grid condenser
- 1 2- to 5-megohm grid leak
- 1 .001  $\mu$ f. fixed mica by-pass condenser
- 1 50-ohm rheostat
- 1 good tube socket for 201-A or 199 tubes
- 1 power type may be used successfully, depending on whether you prefer dry cells or storage battery filament
- 1 1.5-volt block B-battery
- 1 pair of headphones
- 1 sec. of bus or stranded wire for making connections
- 1 piece of board, about 1" x 10" x 12" for mounting apparatus
- 1 6-volt storage battery (or 3 No. 6 dry cells)
- 1 length of strip with five binding posts or 5-pin block clips
- 1 wire circuit jack (or use clips to hold phone cord tips)
- 1 brass angles to support variable condensers
- 1 honeycomb-wound coils (of 500, 750, and 1250 turns, respectively)

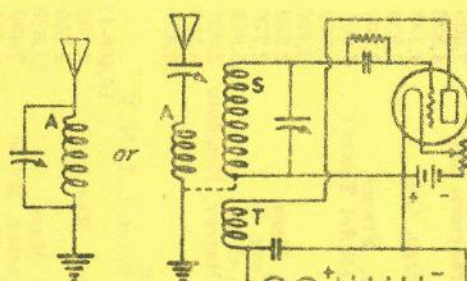
A three coil mounting and coils to cover various ranges can be obtained from the Patent Electric Company, 91 Seventh Ave., New York City, or Charles Branstetter, Inc., Buffalo, N. Y.

For the commercial ship and shore stations coils of 75, 100 and 150 turns may be purchased. See the table on page 12 for coil sizes to cover other services and wavelength ranges. Various sizes of coils may be added as desired. By plugging them into the coil mounting, using the coil combinations described in the table, the wavelength range of the set may be changed. You can then hear all the different kinds of radio communication that we mention as it is being conducted in the different wavelength bands. With coils of moderate size you can hear Arlington's Navy Press and a great many of the low-powered ship and shore stations. But we shall not want to listen to their high speed ship-shore traffic handling at first. Longer wavelengths received with the larger coils are most suitable for getting hour after hour of continuous code practise. Tuning is accomplished with the variable condensers. The type of the incoming signal can be varied by the operator.

## GETTING STARTED

11

In the circuit shown, 1,000-micromicrofarad variable condensers are used in the antenna circuit (A) and across the second-



Phones or Primary of Amplifying Transformer  
**THREE COIL REGENERATIVE RECEIVER**

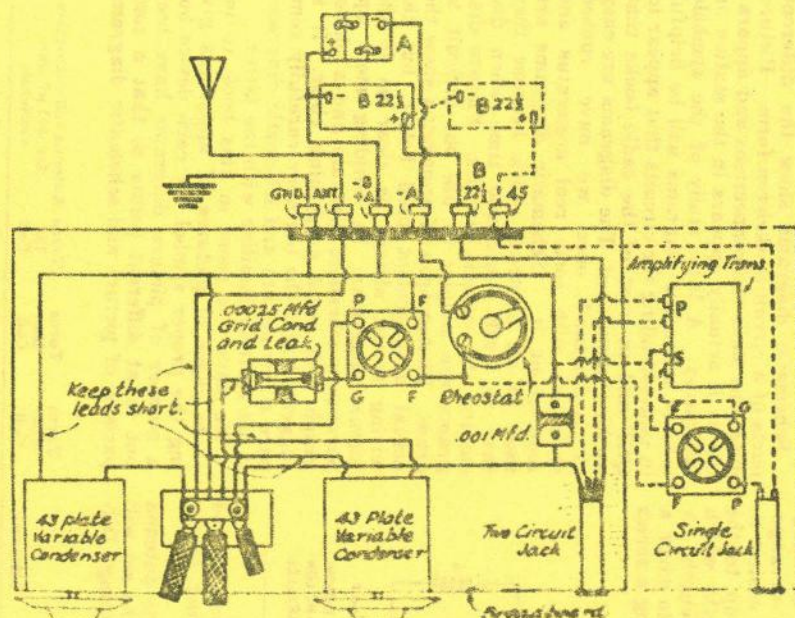
ary coil (S). (1,000  $\mu$ f. = .001  $\mu$ f. as specified in the list of materials.) Condensers with a smaller maximum capacity than this are best for getting good distribution

than 750 meters. It can be made to work within the broadcast range but will not readily go down far below 200 meters. When the tickler can be at the grounded end of the secondary coil, undesirable tuning effects are minimized.

All the parts for a one-tube set are shown properly connected in the picture diagram. By adding one or two more vacuum tubes as suggested by the dotted lines much louder signals may be obtained. It is assumed that phones will be used so that not more than two tubes will be desirable for most code-practice work.

The antenna coil (A) is the left-hand coil in the sketch while the secondary coil (S) is in the center of the coil mounting and the tickler (T) is on the right. The secondary coil is the one which really determines the wavelength band that can be covered with a certain size of secondary tuning condenser.

The dotted line means that equally good results may be expected with the filament circuit either grounded or ungrounded. The principal advantage in grounding the fila-



**SKETCH SHOWING ARRANGEMENT AND CONNECTIONS FOR LONG WAVE RECEIVER**

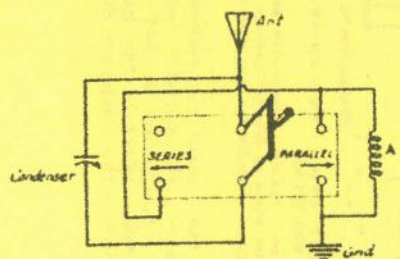
and one stage amplifier (shown dotted). Another stage may be added similarly for loudspeaker work if desired, but detector alone as detector and one stage of amplification in any event gives ample signal strength for use with headphones.

of the stations that you will hear over the dial for amateur and broadcast wavelengths but this size is most suitable for our long-wave receiver. Such a three-coil outfit works best on wavelengths longer

ment and connecting the movable plates of the variable condenser to this side of the circuit is that it minimizes the detuning effect of the hand when brought close to the condenser dial.



The schematic circuit diagram shows two methods of making the antenna coil connection. The "series" connection shown in all the diagrams may be used for all wavelengths but with the "parallel" arrangement shown at the left it will be easiest to tune our antenna circuit clear up to the twenty thousand meter wavelengths which will result in the best signal strength. A large primary coil can be made to cover a large band of wavelengths by using a series



CONNECTING A DOUBLE POLE DOUBLE-THROW SWITCH TO CHANGE THE ANTENNA COIL AND CONDENSER QUICKLY FROM A SERIES TO A PARALLEL ARRANGEMENT

condenser for the shorter wavelengths and changing to parallel for reaching longer wavelength stations.

The farther apart we move the antenna and secondary coils, the easier the set will oscillate and the "sharper" the tuning. Dif-

also make a slight readjustment of the tickler coil position desirable.

#### READING DIAGRAMS

Schematic diagrams show the different parts of a circuit in skeleton form. Picture diagrams show the connections and apparatus as it actually appears in the station or laboratory. A little study of the symbols used in schematic diagrams will be helpful in understanding the circuits that appear in *QST* and in most of the radio books that we have mentioned. The diagrams are easy to understand once we have rubbed shoulders with some real apparatus and read about it. Schematic diagrams are used in all electrical work because they save so much space and time when discussing the various circuits. Picture diagrams are simpler to use but difficult to draw. Photographs of apparatus show the actual arrangement used better, but the wiring is not always as clear as in the picture diagrams. In building most apparatus a schematic diagram and a photograph will make everything clear. It is suggested that the beginner carefully compare a few picture and schematic diagrams if not entirely familiar with the latter.

We have not room in this book to include pages of pictures of apparatus giving the proper symbol for each device but a number of picture diagrams have been put in at different points so that a comparison of picture and schematic diagrams

Service	(Meters)	Turns Ant. Coil	Turns Sec. Coil	Turns Tic. Coil	Antenna coil connection for .001 $\mu$ f. var. condenser
Amateur and Broadcast	140-350	35	25	35	Series
Broadcast and Commercial	250-700	75	50	35	"
Comm'l Ship-Shore Tfc.	450-1500	150	100	75	"
Comm'l and Navy	700-2200	200	150	100	"
NAA Time	1100-4000	300	250	150	Parallel
Arc Stations	2350-4800	200	300	150	"
Arc Stations	2500-8500	500	500	200	"
Commercial, Foreign, and Press	3100-15000	750	750	300	"
Same and NSS Time	6000-21000	750	1250	500	"

ferent stations can be separated more easily when the coils are not too close together. Varying the position of the coils changes the "coupling" as explained elsewhere. The tickler should be brought up toward the secondary coil until a light click is heard in the phones. Then the set is oscillating and stations may be tuned in by the process of turning the dial of the secondary tuning condenser (the one across S). When a station is found, the tickler can be readjusted for loudest signal strength. Louder signals still can be obtained by bringing the antenna more nearly in tune by varying the setting of the antenna condenser which will

will enable one to understand what is intended in all the schematic diagrams here and elsewhere. In general, coils are indicated by a few loops of wire, resistances by a jagged line, and variable elements in the circuit by arrowheads. If a device has an iron core it is usually shown by a few parallel lines opposite the loops indicating coils or windings.

When you can draw and talk about circuits in terms of the various conventional symbols you are on what is familiar ground to every amateur and experimenter. Then you can meet the dyed-in-the-wool expert and understand what he is talking about.

You may find a correspondence school course of some help. It depends on the individual's ability to absorb by mail. In any

event, though, study things out from the information available in this book. Then jump in and enjoy the experience. Learn by doing!

#### SOME OF THE STATIONS YOU MAY HEAR ON THE LONG WAVES

Call	Location	Wavelength	Time (G.M.T.)	Service
NSS	Annapolis, Md.	17,130 (17.6 kc)	2200	Ice report
NAA	Arlington, Va.	2,677 (112.0 kc) 4,409 (68.4 kc)	1655-0255 1655-1530 0255-0330	Time Signals and Press Time Signals, Weather and Navy Press
NAR	Key West, Fla.	2,939-5,657	1655-0300	Time Signals and Weather
NAT	New Orleans, La.	2,752 (107.0 kc)	1655-1500	Time Signals
POZ	Nauen, Germany	18,075 (16.6 kc) 3,900 (77.0 kc)	1155 2355-1155	Time Signals Time Signals
LY	Bordeaux, France	18,940 (15.8 kc)	0801	Time Signals
YN	Lyons, France	15,000 (20.0 kc) 15,500 (19.4 kc)	1700-1750 0818-0850	Wave calibration Time Signals
IDO	Rome, Italy	10,850 (27.6 kc)	0850-1950	Coded report
NPG	San Francisco, Cal.	7,005 (28.6 kc) 4,836 (62.5 kc)	1700-0330 0555-1955	Weather bulletin Time Signals
NPL	San Diego, Cal.	9,798 (30.6 kc) 2,939 (100.0 kc)	1000-1655 1630-1655	Press and time Time Signals
UA	Nantes, France	9,000 (33.3 kc)	1415	Wave calibration
FL	Paris (Eiffel Tower)	7,000 (42.8 kc) 6,000 (50.0 kc) 2,600 (115.0 kc)	1640 1455 2244	Wave calibration Coded synoptic report Time Signals
NAD	Boston, Mass.	2,939 (102.1 kc)	1600-2200	Weather bulletin
NAH	New York, N. Y.	2,776 (107.1 kc)	1530-2200	Weather and navigation
XDA	Mexico City	5,800 (51.7 kc)	0054-1856	Time Signals
NPM	Pearl Harbor, Honolulu	2,828 (107.0 kc) 5,552 (52.3 kc) 11,490 (26.1 kc)	2355 0630-1830 2355	Time Signals Weather Time Signals

#### WQK-WQL-WSS

Rocky Point, L. I., N. Y.	16,465-17,500-16,120	Traffic with different countries	
WCC	Chatham, Mass.	2,150 (140.0 kc) 2,200 (136.0 kc)	Press 2200-1400 Weather conditions
WSO	Marion, Mass.	11,620 (25.8 kc)	
NBD	Bar Harbor, Maine	2,400 (125.0 kc)	0800 Press
NAM	Norfolk, Va.	2,883 (107. kc)	1330-2100 Weather bulletin
GBR	Rugby, England	18,000 (16.7 kc)	0000-0800-1120-2000 Press
WSE	East Moriches, L. I., N. Y.	2,800 (107. kc)	0130 Press
NBA	Darien, Panama	6,518 (46.0 kc)	0900-1000 Time and Press
	(Balboa, Canal Zone)	6,518 (46.0 kc)	1755-2755 Time Signals
OUI	Eilvese, Hanover, Ger.	9,600 (31.3 kc)	Press
WAX	Miami (Hialeah), Fla.	5,552 (54.0 kc) 600-1,599-2,175 (500-188-138 kc)	1130 Press
WNU	New Orleans, La.	3,331 (90.0 kc) 600-1,700 (500-177 kc)	0500-1700 Press 1630 Weather
WSH	East Moriches, L. I., N. Y.	2,400 (125.0 kc)	0315 Press
WSA	East Hampton, L. I., N. Y.	650 (462.0 kc)	0315 Press
WH	New Brunswick, N. J.	13,750 (21.8 kc)	0518 Press
WBF	Boston, Mass.	600-690-2,025-2,350	
WNN	Mobile, Ala.	600-680-1,713	
UQ	Bluefields, Nicaragua	1,850-2,100	
UW	Cape Gracias, Nicaragua	650-2,000	
UL	Managua, Nicaragua	600-1,800-2,400-4,600	
UG	Tegucigalpa, Honduras	600-1,950-4,330	
WCI-WGC	Tuckerton, N. J.	16,700-15,900 (17.05-18.85 kc)	



## MAY 1979 UPDATE

### ADDITIONS:

BARBARICK, DEANNA  
BARBARICK, MIKE  
SRA 1419C  
Anchorage, Alaska 99502

KL7IZJ  
KL7IXT  
Home 349-1158  
Work (D) 265-4652 (M) 279-1441

BARBER, WILLIAM J.  
5201 E. 22nd Avenue  
Anchorage, Alaska 99504

KL7GCM  
Home 333-7019  
ARRL

BURG, RUTHE R.  
2004 W. 45th #2  
Anchorage, Alaska

KL7IJD  
Home 274-8353  
Work 274-4582 ext. 14  
ARRL

DUFFY, WILLIAM F.  
2300 Paxson Drive  
Anchorage, Alaska 99504

KL7HLR  
Home 333-6919  
Work 344-9661 ext. 231  
ARRL

GEORGE, HENRY F.  
SRA 1557X  
Anchorage, Alaska 99507

Home 344-0417  
Work 279-3471

TWIGGS, JOHN D. (JACK)  
2330 Tagalak Drive  
Anchorage, Alaska 99504

KL7HJZ  
Home 333-9653  
Work 265-4308

### CHANGES, CORRECTIONS, AND ADDITIONS:

BAIN, DON

K3CKC

BEAUGARD, PAT

KL7EJ  
Work 271-5340

CLOYD, DAVE

KL7M

DOUGLAS, BARBARA

KL7IRL

GILMORE, WAYNE

AL7AP

LAWRENCE, DAVE

ARRL (Life)

MOORE, MARY

KL7P

MOORE, TOM

KL7Q

OLSON, DAVE

KL7K

OLSON, PATTI

KL7L

OWENS, TOM

K7GUH

WILCOX, STEVE

Home 349-5056



## INTERNATIONAL AMATEUR RADIOCOMMUNICATION

The following recapitulation of the International Radio Regulations (Geneva, 1959) concerning communication between amateur stations and transmission of third party traffic by amateurs is published for the information and guidance of United States licensed amateurs:

Article 41, Section 1. "Radiocommunications between amateur stations of different countries shall be forbidden if the administration of one of the countries concerned has notified that it objects to such radiocommunications." Cambodia (XU), Thailand (HS), and Viet Nam (3W) have so notified.

Article 41, Section 2. "(1) When transmissions between amateur stations of different countries are permitted, they shall be made in plain language and shall be limited to messages of a technical nature relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. It is absolutely forbidden for amateur stations to be used for transmitting international communications on behalf of third parties. (2) The preceding provisions may be modified by special arrangements between the administrations of the countries concerned."

Arrangements permitting third party communications have been effected between the United States and the following countries only:

- |                          |                       |                       |
|--------------------------|-----------------------|-----------------------|
| 1. Argentina             | 9. Dominican Republic | 17. Liberia           |
| 2. Bolivia               | 10. Ecuador           | 18. Mexico            |
| 3. Brazil                | 11. El Salvador       | 19. Nicaragua         |
| 4. Canada                | 12. Guyana            | 20. Panama            |
| 5. Chile                 | 13. Haiti             | 21. Paraguay          |
| 6. Colombia              | 14. Honduras          | 22. Peru              |
| 7. Costa Rica            | 15. Israel            | 23. Trinidad & Tobago |
| 8. Cuba                  | 16. Jordan            | 24. Uruguay           |
| <del>JAMAICA</del> GHANA | <del>GUATEMALA</del>  | 25. Venezuela         |

Only amateur stations identified by properly authorized call signs having a one or two-letter prefix beginning with "W" or "K" are authorized by the United States, and third party communication is presently permissible with all such stations except those identified by prefixes KA2 - KA9, inclusive.

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*This is an update on the above FCC 1474*



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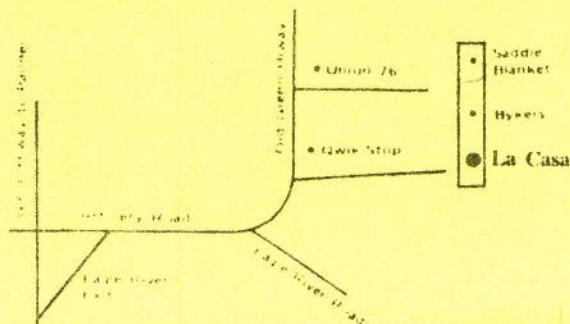
# La Casa

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or weekends)



## THE HAM SHACK

By: W8JJI

One of the latest subjects of interest to hams and experimenters is the direct reception of TV signals from communications satellites. This subject was covered in an article in the Technical Information Series in the March/April 1979 issue of *The Electron*. As pointed out in the article, the signals from a communications satellite are very feeble and high gain antennas and low noise amplifiers are essential. On the surface, it would appear that the hams and experimenters have little chance of success unless they duplicate the commercial satellite earth stations. This of course would be prohibitively expensive for most hams.

The fact that the task appears to be impossible, or at least highly improbable will not be a deterrent to the true experimenter. The experimenter thrives on finding new and unexpected solutions to problems. The history of radio is full of examples of things that were thought to be impossible that were done by amateurs. This uncanny ability to find unorthodox solutions to problems is often referred to as amateur ingenuity.

One could ask the question of why anyone would want to spend time trying to pick up TV signals directly from satellites when there is plenty of TV programming available in most areas of the world. Of course, a home earth station would pick up more channels, but this would hardly be worth the hours of experimentation that would be required to find a way to build an economical earth station. No, the cause of the interest is the challenge itself. The signals, feeble as they may be, are there, and there is a challenge to be able to pick them up.

If the experimenters and hams who pursue this hobby interest should be able to develop a low cost earth station that would produce satisfactory pictures, it could change the whole course of broadcasting. Once home earth stations were proven to be economically feasible, they would be demanded by the public. Every home, regardless of its geographical location would be capable of receiving dozens of TV programs at any one time.

This brings up interesting legal questions that would have to be battled out in the courts. But as long as the activity is a hobby where the only goal is to improve the quality of reception, there seems to be no legal barrier.

What are the chances in favor of experimenters developing low cost methods of receiving acceptable TV signals from communications satellites? Are not the large development laboratories putting their finest brains to work on the job? In the article that we mentioned earlier, the technology involved seems to be well understood. Is it possible that a group of experimenters can accomplish something that is eluding the best brains in the world?

If history is any guide, there is probably a pretty good chance. Although the amateur experimenter lacks the sophisticated knowledge and test equipment of the professional, he partially compensates for this by being technically fearless. By this we mean, that he isn't afraid to try anything. The frequencies above the 2 MHz were first used effectively by amateurs not because of any great knowledge, but rather because of the lack of knowledge. Certainly the commercial interests could have developed these frequencies if they had tried. The fact is that they "knew" that long range propagation of signals at these frequencies was impossible, so they never tried. The ham, on the other hand, was forced out of the more desirable part of the spectrum, and not knowing any better, tried to use the high frequencies and found

that they were not only usable, but were much better than the lower frequencies for long range communications.

What can the experimenters trying to pick up TV signals from satellites try that hasn't been tried already by the professionals? Of course, the answer to this question lies in what we called amateur ingenuity in a preceding paragraph. In talking with some of these experimenters we hear some rather interesting ideas.

First of all, we know that the antenna of an earth station must have a very high gain in order to give a satisfactory signal to noise ratio. We know that we need a good signal to noise ratio for broadcast quality reception. The experimenters are asking just how bad the signal to noise ratio can be and still have a signal which they would accept. This is an interesting concept because amateur radio was started around barely audible signals that were buried in noise. Another question involved whether or not anything could be done to process a noisy signal to improve its quality after reception.

Commercial earth stations use antennas that are at least 15 feet in diameter, that much as the gain of an antenna decreases 3 dB when the area is halved, the loss involved in using a smaller antenna might not degrade the signal to noise ratio so much that the signal might not be considered acceptable. Another factor behind a large area antenna is a narrow beam width. Are there ways of narrowing the beam that could be accomplished with a small antenna?

Another expensive component of a commercial earth station is the low noise amplifier at the antenna. At present these low noise amplifiers use expensive gallium arsenide FETs. Is there some other way to build an amplifier that would have a sufficiently low noise figure?

Still another factor that might considerably simplify the experimenter's work is that future communications satellites will probably operate at much higher frequencies and will have higher power transmitters. As the frequency becomes higher antennas become smaller.

Regardless of the measure of success achieved, the experimenters in this field will acquire a great deal of information on the subject of microwave reception. There is a good probability if enough people become interested, new developments will be made.

This column is intended to help anyone who is interested in experimenting with the reception of TV signals from satellites. To the extent that we can practically do so, we will try to disseminate information that we receive on the subject to all interested parties. So drop us a line. Are you interested in the subject? Have you done anything in the area?



Well I thought I had everything figured out but I found this page with nothing on the other side and it is 6:30 PM Saturday of the Memorial Day week end and the xerox machine quit as I said elsewhere and I can't make nice black copy for the stencil machine so I have a page for notes.....or design your next rig.....or well surely you can think of something.....I can't!!!!!!





"SEND A PARKA TO PHILLY (ROUND TRIP) FOR THE YLRL CONVENTION" RAFFLE REPORT

At the suggestion of our enterprising fund raiser, Wilse, KL7CQ, the Anchorage Amateur Radio Club held a raffle to pay for the plane ticket to send a member of PARKA to Philadelphia for the YLRL Convention. This lucky YL, Sue Michael, WL7ABK, will also represent the "Big Club" at the convention which is only held once every four years.

Witse handled the raffle in which 100 tickets were sold at \$20.00 each. The drawing was to be June 1st but the tickets were all snatched up so quickly that the decision was made to have it at the May general club meeting. The following is a list of the winners and their prizes as well as a general accounting of funds.

First Prize - John C.A. Bierman, KL7GNP (Our QSL Bureau)  
4304 Garfield St.  
Anchorage 99503  
KENWOOD TS-820S

Second Prize - William D. Horton  
2720 Meadow Creek Dr.  
Eagle River 99577

\$200

Third Prize - James W. Smith, KA7APJ  
5717 NE 56th  
Seattle, WA

\$100

100 tickets @ \$20 ea. = \$2,000.00

Prizes and expenses 1,254.02

Airline Ticket 553.30

Balance from raffle \$ 192.68

Being a PARKA member as well as treasurer of the "Big Club" (that's what we call the AARC) I would like to thank everyone who participated in the raffle as well as the other fund raising projects we've had to send Sue to Philly. It has all been a lot of fun as well as a worthwhile project.

Betty, KL7AP



## FIELD DAY 1979

The Anchorage Amateur Radio Club will have its annual Field Day this year at the East High School parking lot. Tents can be pitched on the lawn and trailers parked overnight.

There will be a family picnic in conjunction with field day so COME ONE, COME ALL!!! RSVP please on 34/94, 16/76 or landline to Mary, KL7P, Lucy, KL7LH, or Betty, KL7AP. The Club will furnish the main dish and soda but we need to know how much to prepare. For the rest of the picnic people with last name A - M please bring a salad and N - Z a dessert. Tables and /or saw horses with plywood will also be needed.

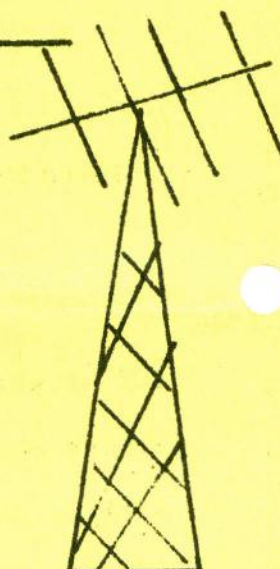
The chairpersons for the event are: Bill KL7ITI, 337-1779  
Tom KL7Q, 753-9400  
Don KL7IGE, 337-5717

PARKA members will be running the 10 meter station this year so all YL's are urged to sign up early, as well as OM's for the other positions.

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# FIELD DAY

FAMILY PICNIC JUNE 23



★ RSVP ★

LUCY KL7LH	349-4891
MARY KL7P	753-9400
BETTY KL7AP	344-1257

OR

34/94 — 16/76



### HAM ADS

BIG BARGAIN..... For heaven's sake won't someone buy Betty's canoe or else we are going to keep seeing it appear again and again!!!!!!! It is a 17 foot square stern Smokercraft and it really is a bargain at 250.00 call Betty KL7AP at 344-1257

---

A Hammarlund station RCVR HQ170 XMTR HT500 CW AM FSK SSB  
100 watts call Dave Zugsberger WL7ADL 243-8735

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Matthew Johnson is a very enthusiastic new ham 14 years old and is looking for equipment to use as a general . He is WL7AGL and is not very wealthy. He would sure appreciate any help you can give him. His address is Box 474, Nome AK 99762

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Al W7KAP also in Nome is asking a mere 75.00 for a 275 watt Johnson matchbox and might just be willing to haggle . You can find him on 14292 or 7250

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That seems to be all the ads and I have all this space left. So a word about the free door prize tickets of which there will be a bunch this June meeting First every member will get \$5.00 wrth of free tickets. Each person that gets to the meeting before it starts , gets one free ticket. And I revised the schedule for ticket upgrading.....Novice gets one free ticket, Tech gets two free tickets general gets four free tickets, advanced gets six and an extra gets eight!!!!!! Then there is usually a "fun" free ticket Also winners of transmitter hunts get six free tickets. Of course this is providing the new activities chairman thinks so!!!!!! Then maybe an operating contest each month.

If the xerox hadn't quit and if someone was around who knew how to fix it I would have filled in with some stupid pix but think I will let there be space for "NOTES"

### NOTES



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